APPENDIX II:

CLAIM AMENDMENTS:

Amend Claim 1 as indicated in the following listing of the claims:

1. (*currently amended*) A gas-phase fluidized-bed reactor for polymerizing ethylenically unsaturated monomers, which comprises

a reactor chamber (1) in the form of a vertical tube which has a region of transition in the lower section of the tube, followed by a reaction zone which is followed by a calming zone (2) in the upper section of the tube,

a circulation gas line (3) which is connected to the upper section and the lower section of the reactor chamber and is adapted to convey a reaction gas from the calming zone to the region of transition, and

a circulation gas compressor (4) and a cooling device (5), the circulation gas compressor (4) and the cooling device (5) being sited in the circulation gas line (3),

wherein the region of transition is adapted for transitioning the reaction gas from the circulation gas line into the reactor chamber, and wherein the reactor chamber has, in the ~~in the~~ region of transition, either no gas distributor plate or has a gas distributor plate having a total surface area and gas orifices which occupy more than ~~20%~~ 50% of the total surface area of said gas distributor plate, and wherein the gas-phase fluidized-bed reactor has no internal heat exchanger in the reactor chamber.

2. (*original*) A reactor as claimed in claim 1, wherein there is no gas distributor plate in the region of transition of the reaction gas from the circulation gas line into the reactor chamber or in the lower section of the reactor chamber itself.

3. (*original*) A reactor as claimed in claim 1, wherein, in the region of transition of the reaction gas from the circulation gas line into the reactor chamber or in the lower section of the reactor chamber itself, there is a gas distributor plate the total surface area of whose gas orifices is more than 90% of the total surface area of said gas distributor plate.

4. (*previously presented*) A reactor as claimed in claim 1, wherein flow reshapers are sited in the region of transition of the reaction

gas from the circulation gas line into the reactor chamber in order to reshape the flow pulse of the incoming gas, said reshapers being arranged so as to bring about substantially homogeneous introduction of the gas flow into the fluidized bed.

5. (*canceled*)

6. (*previously presented*) A reactor as claimed in claim 1, having an internal diameter of the reactor chamber (1) of more than 0.5 m.

7. (*previously presented*) A reactor as claimed in claim 1, which further comprises a closable flap situated in the region of transition from the circulation gas line into the lower section of the reactor chamber which flap is adapted to prevent the penetration of polymer particles into the circulation gas line when the compressor is switched off.

8. (*original*) A reactor as claimed in claim 7, wherein the closable flap is provided with uniformly distributed holes having a diameter of between 1 and 7 mm.

9. (*canceled*)

10. (*previously presented*) A reactor as claimed in claim 1, wherein between the reactor chamber (1) and the compressor (4) and the cooling devide (5) of the circulation gas line there is sited a cyclone to separate off polymer and catalyst particles from the circulation gas.

11. (*withdrawn - previously presented*) A process for polymerizing ethylene or for copolymerizing ethylene with C_3- to C_8-α-olefins, wherein the (co)polymerization is conducted in a reactor as claimed in claim 1.

12. (*withdrawn - previously presented*) A process as claimed in claim 11, wherein polymerization is conducted in the presence of condensed monomers and/or condensed hydrocarbons.

13. (*withdrawn - previously presented*) A process as claimed in claim 11, wherein a mixture comprising gaseous and liquid monomers is fed into the reactor chamber.

14. (*withdrawn - previously presented*) A process as claimed in claim 11, wherein to prepare a (co)polymer of a preselected density d the (co)polymerization is conducted at a temperature situated within a range bounded by an upper limit of equation (I)

$$T_H = 171 + \frac{6d'}{0.84-d'} \qquad (I)$$

and a lower limit of equation (II)

$$T_L = 173 + \frac{7.3d'}{0.837-d'} \qquad (II)$$

where

T_H is the highest reaction temperature in °C

T_L is the lowest reaction temperature in °C

d' is the numerical value of the density (d) [g/cm³] of the (co)polymer to be prepared.

15. (*withdrawn - previously presented*) A process for preparing EPDM, wherein the copolymerization is conducted in a reactor as claimed in claim 1.